

EXPLANATION OF MAP SYMBOLS

High-angle fault -- solid where fault is well-defined, dashed where approximately located or poorly defined, dotted where concealed, queried where questionably located. Relative vertical movement shown by U and D (U=upthrown side, D=downthrown side). Arrows indicate relative movement. Thrust fault -- solid where fault is well-defined, dashed where approximately located or poorly defined, dotted where concealed, queried where questionably located. Saw teeth on upper plate. • • • Anticline Fold axis -- solid where well-defined, dashed where approximately located or poorly-defined, dotted where concealed. Arrow on axial trace indicates direction of plunge. · · · Syncline 1 Quaternary deformation locality O 0.0-0.9 ① 1.0-1.9 Earthquake magnitude (1) 2.0-2.9

① 0.0-0.5 **⑩** 1.6-2.0

 S 0.6-1.0
 ■ 2.1-2.5

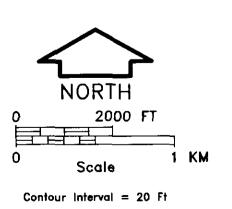
 Ø 1.1-1.5
 ■ 2.6-3.0

Estimated horizontal error in hypocenter location (km)

1.0-1.9 2.0-2.9 Fault plane solution from first-motion studies

QUATERNARY DEFORMATION LOCALITIES

- 1. Marine terrace deposits with approximately 2 m of cumulative offset along a narrow fault zone (down to the east) that strikes approximately N. 50° W., dips 70° NE. (Dupré, 1990b)
- Thrust faulted marine terrace deposits with estimated 15-20 m of throw (up to the south) along eastern extension of Sylvan thrust; terrace deposits tilted approximately N. 65° W., dip 28° NE. (Dupré, 1990b)
- Near-vertical fault splay of Chupines fault zone exposed in trench; stratigraphic relationships and soil profiles suggest Holocene dis-placement (Vaughan and others, 1991)
- 4. Continental deposits ("Paso Robles Formation") cut by branch of Chupines fault exposed in trench; fault strikes east—west and dips vertical (Bowen, 1980)
- 5. Possible hydrogeologic barrier along buried trace of Hatton Canyon fault (Oliver, 1991)
- 6. Landslide deposits offset by near-vertical trace of Hatton Canyon
- 7. Fluvial terrace remnant strikes N. 62° W., dips 22° NE. along Hatton Canyon fault zone
- 8. Fluvial terrace deposits south of Navy fault tilted 15 NE.
- 9. Fluvial terrace deposits offset approximately 1 m along fault of Navy zone that strikes approximately N. 22° W., dips 65° NE. (seé Figure 3)
- Series of resistant ridges in fluvial terrace deposits strike N. 20-30° W. suggest that terrace deposits have been sheared; deposits appear to be truncated on the southwest by fault of Berwick Canyon zone (Clark and others, 1974) 11. Fluvial terrace deposit strikes N. 50° W., dips 18° NE. within Tularcitos fault zone (see Figure 9)
- Fluvial terrace remnant faulted against steeply dipping Monterey Formation by en echelon fault of Laureles zone that strikes N. 38° W.



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FAULTS AND EPICENTERS: SEASIDE 7.5-MINUTE QUADRANGLE

For: QUATERNARY FAULTING OF THE GREATER MONTEREY AREA, CALIF.

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